

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Aldress: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.iispto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/509,643	07/24/2000	Hermann Link	5509	7739	
75	90 07/17/2002				
Patrick J O'Shea			EXAMINER		
Samuels Gauthier & Stevens			MILLER, BRANDON J		
Suite 3300 225 Franklin St	reet		<u>'</u>		
Boston, MA 02110			ART UNIT	PAPER NUMBER	
			2683		
			DATE MAILED: 07/17/2002	DATE MAILED: 07/17/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

Jw

		176					
	Application No.	Applicant(s)					
	09/509,643	LINK ET AL.					
Office Action Summary	Examiner	Art Unit					
	Brandon J Miller	2683					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. ID (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on	_·						
2a) ☐ This action is FINAL . 2b) ☑ Thi	is action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)⊠ Claim(s) <u>10-23</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>10-23</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
 a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domest 							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5	5) Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)					

Art Unit: 2683

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 10-11, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Takayama.

Regarding claim 10 Takayama teaches a method for selecting one of several receivers of a diversity receiving system comprising comparing the level of signals of an automatic gain control of the receivers and selecting a receiver whose control signal has the lowest level (see col. 1, lines 16-20, col. 4, lines 61-65, and col. 6, lines 20-22).

Regarding claim 11 Takayama teaches a switchover from one receiver to another receiver (see col. 2, lines 15-21) and selecting a signal level that is below a signal level of another signal by a specifiable minimum (see col. 6, lines 17-22 and FIG. 3(c).

Art Unit: 2683

Regarding claim 20 Takayama teaches a plurality of radio receivers that provide uniquely associated receiver output signals indicative of a received radio signal (see col. 1, lines 6-8 & 16-20). Takayama also teaches providing a diversity receiver output signal indicative of a receiver output signal associated with a receiver and a selection mechanism for selecting a radio receiver of a diversity receiving system that has applied the smallest gain correction associated with its receiver output (see col. 1, lines 16-20, col. 4, lines 61-65, and col. 6, lines 20-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Kishigami.

Regarding claim 12 Takayama teaches a device as recited in claim 10 except for a mobile diversity receiving system. Kishigami teaches a mobile diversity receiving system (see col. 1, lines 9-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Takayama adapt to include a mobile diversity receiving system because this would allow for improved reception of signals in mobile devices.

Regarding claim 13 Kishigami teaches a video receiver (see col. 1, lines 22-24).

Regarding claim 14 Takayama teaches selecting a signal that has the lowest level (see col. 6, lines 17-22) and Kishigami teaches data transmissions (see col. 9, lines 45-48).

Art Unit: 2683

Regarding claim 15 Kishigami teaches line synchronization (see col. 2, lines 7-12).

Regarding claim16 Takayama teaches an output signal selected from a first and second radio receiver (see col. 1, lines 6-8 & 21-25). Takayama teaches a comparator that receives a first signal from a radio receiver and a second signal from another radio receiver and determines which of the signals to select (see col. 5, lines 21-27). Takayama teaches a signal that has a low level and provides a selection signal indicative of the selected signal (see col. 6, lines 8-10 & 17-22). Takayama teaches a switching element responsive to a selection signal (see col. 7, lines 34-38). Takayama does not teach a first data signal and a second data signal, or based upon a state of a selection signal selecting as the output signal either a first data signal or a second data signal. Kishigami teaches generating and supplying a data signal (see col. 9, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Takayama adapt to include a first data signal and a second data signal, and based upon a state of a selection signal selecting as the output signal either a first data signal or a second data signal because this would allow for receiver selection that would improve selection of multiple data signals.

Regarding claim 17 Takayama and Kishigami teach a device as recited in claim 16 except for first and second control signals that are indicative of an amount of automatic gain control correction applied by receivers, respectively to their received signals to provide first and second data signals. Takayama teaches first and second signals (see col. 3, lines 67-68 and col. 4, lines 4-6). Kishigami teaches automatic gain control (see col. 2, lines 33-37) and first and second data signals (see col. 5, lines 21-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Takayama and Kishigami adapt to include

Art Unit: 2683

first and second control signals that are indicative of an amount of automatic gain control correction applied by receivers, respectively to their received signals to provide first and second data signals because this would allow for receiver selection that would improve selection of multiple signals

Regarding claim 18 Kishigami teaches first and second data signals (see col. 5, lines 21-22) and audio data (see col. 7, lines 27-29).

Regarding claim 19 Kishigami teaches first and second data signals (see col. 5, lines 21-22) and video data (see col. 1, lines 22-24).

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Kishigami and Suenaga.

Regarding claim 21 Takayama teaches a device as recited in claim 20 except for a block synchronizer that delays switching of a receiver output signal from selection of a first radio receiver to a second radio receiver, until a first radio receiver has completed transmitting a predefined block of data. Takayama teaches selecting a first radio receiver and a second radio receiver (see col. 3, lines 13-16). Kishigami teaches transmitting a predefined block of data (see col. 9, lines 46-47) and Suenaga teaches a block synchronizer (see col. 4, lines 48-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Takayama adapt to include a block synchronizer that delays switching of a receiver output signal from selection of a first radio receiver to a second radio receiver, until a first radio receiver has completed transmitting a predefined block of data because this would allow for receiver selection that would improve selection of signals while keeping data synchronized.

Art Unit: 2683

Regarding claim 22 Kishigami teaches a plurality of radio receivers comprising a plurality of television receivers (see col. 1, lines 13-17).

Regarding claim 23 Takayama teaches a comparator that compares radio receiver signals (see col. 5, lines 21-27). Takayama teaches selecting a level of a signal that has the smallest gain correction to its associated receiver output signal and providing a selection signal (see col. 6, lines 17-22 and FIG. 3(c). Takayama teaches a switching element responsive to a selection signal and receiver output based upon a state of selection signal (see col. 7, lines 34-38).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Andoh U.S Patent No. 5,241,701 discloses an antenna selecting diversity receiving apparatus.

Lindenmeier U.S Patent No. 6,169,888 discloses a receiving antenna scanning diversity system with controllable switching.

Cvetkovic U.S. Patent No. 6,141,536 discloses a diversity radio system with RDS.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Art Unit: 2683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

July 11, 2002

WILLIAM TROST

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600